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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,589	12/22/2000	Tony Richard King	5035-105 US	2476

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EXAMINER
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CHANNAVAJALA, SRIRAMA T

ART UNIT	PAPER NUMBER
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2164

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/720,589

Applicant(s)

KING ET AL.

Examiner

Srirama Channavajjala

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-23 have been presented for examination

***Drawings***

2. The Drawings filed on 12/22/2000 are acceptable for examination purpose

***Priority***

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d), based on Application No. GB 9909607.5 filed on 4/26/1999.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-9,11-13,16-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Sparks et al. [hereafter Sparks], US Patent No. 6298385.

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6. As to claim 1, 19, Sparks teaches a system which including 'copying a media file to a device over a network' [col 2, line 11-13, line 40-44, col 4, line 5-8, line 65-67, fig 4], Sparks specifically teaches downloading, and copying multimedia files from network as detailed in fig 4, copying media file to a device over a network corresponds to copying multimedia files from network to user computer as detailed in col 4, line 5-8, line 65-67, fig 4; 'to enable a copy of the media file to be played' [col 4, line 5-10], Sparks specifically teaches media or multimedia files are being executed to play on "real-time" playing as detailed in col 4, line 5-10; 'whereby surplus bandwidth that is not required for playing the media file is used to enhance the copy of the media file on the device'[col 5, line 49-54, fig 3a-3b], Sparks specifically teaches surplus bandwidth that is not required for playing the media file because Sparks disclosed using at minimum 14.4 k baud modem used transmission of the multimedia file over a high bandwidth line such as ADSL line as detailed in col 5, line 49-54.

7. As to claim 2, Sparks disclosed 'surplus bandwidth is made available as a result of (i)playing the media file at a reduced rate or quality' [col 4, line 18-24]; (ii) pausing playback of the media file"[col 3, line 23-26].

8. As to claim 3, Sparks disclosed 'enhancement is performed according to a profile that is stored in a server' [col 4, line 58-60], Sparks specifically teaches network server maintains profile of different multimedia files and formats.

9. As to claim 4, Sparks disclosed 'enhancement is performed according to a profile that is transmitted to a server by the device before or during copying' [col 4, line 58-64].

10. As to claim 5, Sparks disclosed 'enhancement is performed according to a profile that is a combination of values stored in a server and values transmitted to the server by the device before or during copying' [col 5, line 1-9].

11. As to claim 6, Sparks disclosed 'data required for playback is selected according to a profile that is stored in a server' [col 5, line 52-54], Sparks specifically teaches reference marker is placed for a particular time period for example one minute mark for real-time playback of the file as detailed in col 5, line 52-54.

12. As to claim 7, Sparks disclosed 'data required for playback is selected according to a profile that is transmitted to a server by the device before or during copying' [col 5, line 52-59].

13. As to claim 8, Sparks disclosed 'data required for playback is selected according to a profile that is a combination of values stored in the server and values transmitted to the server by the device before or during copying' [col 5, line 14-20].

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14. As to claim 9, Sparks disclosed 'copy of the media file on the client acts as a temporary cache and all or part of the media file is deleted during or at the end of playback' [col 6, line 39-43].

15. As to claim 11, Sparks disclosed 'device with data for purposes other than playback, including (i) analysis of the media data [col 5, line 14-15], (ii) recompression of the media data into a new format' [col 2, line 42-44], (iii) transfer of the media data to another medium such as paper, film, magnetic tape, disc, CD-ROM or other digital storage medium' [col 2, line 62-65, col 4, line 5-7], digital storage medium corresponds to network storage server or any local storage device .

16. As to claim 12-13, Sparks disclosed 'media file encodes audio' [col 3, line 64-67].

16. As to claim 16, Sparks disclosed '(i) to load a low quality version of an entire sequence of material to allow subsequent fast play through the material' [col 5, line 52-54], '(ii) to load certain key frames for the sequence for scrubbing through the material' [see fig 3a-3b]; '(iii) to improve the quality of the frames surrounding a current playback position' [col 5, line 39-41].

17. As to claim 17-18, Sparks disclosed 'device is a client in a client server network' [see fig 1, col 1, line 61-63].

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18. As to claim 20, 22, Sparks teaches a system which including 'a computer program which enables a client to enhance or supplement the copy of a media file copied to it from a server over a network' [col 2, line 11-13, line 40-44, col 4, line 5-8, line 65-67, fig 4], Sparks specifically teaches downloading, and copying multimedia files from network as detailed in fig 4, copying media file to a device over a network corresponds to copying multimedia files from network to user computer as detailed in col 4, line 5-8, line 65-67, 'using surplus bandwidth that is not required for playing the media file on the client'[col 5, line 49-54, fig 3a-3b], Sparks specifically teaches surplus bandwidth that is not required for playing the media file because Sparks disclosed using at minimum 14.4 k baud modem used transmission of the multimedia file over a high bandwidth line such as ADSL line as detailed in col 5, line 49-54.

19. As to claim 21, 23, Sparks disclosed 'a client programmed with the computer program ' [see fig 1,col 3, line 50-63].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 10,14-15, are rejected under 35 U.S.C. 103(a) as being unpatentable over Sparks et al. [hereafter Sparks], US Patent No. 6298385 as applied to claim 1 above, further in view of Lei et al. [hereafter Lei], US Patent No. 6356665

21. As to claim 10, Sparks disclosed 'media file encoded video and the image data corresponding to each video frame or sequence of frames is generated' [see fig 3a-3b, col 5, line 47-53]. It is however, noted that Sparks does not specifically teach 'wavelet transform and modified with SPIHT compression, and the resultant bitstream includes several discrete bitstream layers, each bitstream layer enabling image data at a different spatial resolution to be displayed on a display', although Sparks specifically teaches file compression, especially multimedia file compression, and transmitting data over network [see fig 2]. On the other hand, Lei disclosed 'wavelet transform [fig 1-2, element 18] especially wavelet transform is used with respect to lossless entropy coding technique that encodes the various coefficients in quad-tree as detailed in fig 2, col 3, line 65-67, col 4, line 1-2, and modified with SPIHT compression '[col 1, line 51-54], Lei specifically teaches SPIHT used in improving compression efficiency because it



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maintains, manipulates LIS, LIP, LSP as detailed in col 1, line 51-54, and the resultant bitstream includes several discrete bitstream layers, each bitstream layer enabling image data at a different spatial resolution to be displayed on a display' [fig 6, element 150,152,154], bitstream layers corresponds to fig 6B, bitstreams corresponds to element 150,152,154.

It would have been obvious to one of the ordinary skill in the art at the time of Applicants invention to incorporate the teachings of Lei et al. into optimizing playback of media files over a data network of Sparks et al. because both Sparks, Lei are directed to image compression and decompression, more specifically Sparks is directed to accessing, viewing, storing multimedia files that including file compression [see fig 2, Abstract], while Lei is directed to image coding technique, more specifically quad-tree embedded encoder techniques in image processing [see Abstract]. One of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Lei into optimizing playback of media files because that would have allowed users of Sparks to process images or video frames compressed using SPIHT encoding algorithm because SPIHT achieves good compression efficiency [see Lei, col 1, line 55-57] bringing the advantages of quality images.

22. As to claim 14-15, Lei disclosed 'data transmitted using the surplus bandwidth and which is only decoded if required to enhance the copy of the media file on the device' [col 3, line 38-42].

***Conclusion***

**The prior art made of record**

- a. US Patent No. 6298385
- b. US Patent No. 6356665

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

c. Paolo Bellavista et al. "How to support internet-based distribution video on demand to portable devices", proceedings of the seventh international symposium on computers and communications, IEEE 2002 , 8 pages.

d. Dapeng Wu, et al. "streaming video over the internet: approaches and directions", IEEE transactions on circuits and systems for video technology, vol 11, no. 3, march 2001, pp 282-200

e. Youngseop Kim et al. "lossless volumetric medical image compression", document number: CDVMR TR-99-16, june 17,19998 pages

f. Youngseop Kim et al. "lossless volumetric medical image compression", document number: CDVMR TR-99-07April 23,1999,3 pages

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is 571-272-4108. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popvici, can be reached on 571-272-4083. The fax phone numbers for the organization where the application or proceeding is assigned is 703/872-9306

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

sc  
*Patent Examiner.*  
February 10, 2005.

  
SRIRAMA CHANNAVAJJALA  
PRIMARY EXAMINER